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WE CLAIM:

1. A compact moiré effect body scanner for generating 3-D images, the scanner including:

an elongate projection module having a light source,

5 a first objective lens for directing a beam of light from the source along a first central longitudinal axis,

a first photographic grid for the beam of light and mounted in a plane at right angles to the first central axis to illuminate a body to be scanned, and

10 an elongate imaging module adjacent the elongate projection module, having a second central longitudinal axis parallel to the first central axis, the imaging module incorporating

a second objective lens for receiving reflected light from the body,

15 a second photograph grid for the reflected light and mounted in a plane at right angles to the second central axis, and

imaging means for recording a deformed grating image reflected from the body and captured beyond the second photographic grid.

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2. The compact moiré effect body scanner according to claim 1, in which the imaging means is a digital camera.

25 3. The compact moiré effect body scanner according to Claim 1, in which the first and second objective lenses have the same focal length and are mounted in a common plane.

30 4. The compact moiré body scanner according to Claim 1, in which nodal points of the first and second objective lenses are separated by identical distances from the respective photographic grids.

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5. The compact moiré effect body scanner according to Claim 2, in which the first and second objective lenses have the same focal length and are mounted in a common plane.

5           6. The compact moiré body scanner according to Claim 2, in which nodal points of the first and second objective lenses are separated by identical distances from the respective photographic grids.

10           7. The compact moiré body scanner according to Claim 3, in which nodal points of the first and second objective lenses are separated by identical distances from the respective photographic grids.

15           8. The compact moiré body scanner according to Claim 5, in which nodal points of the first and second objective lenses are separated by identical distances from the respective photographic grids.

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